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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,677	04/16/2001	Ludwig Hofmann	112740-206	2308
29177	7590	03/30/2004	EXAMINER	
BELL, BOYD & LLOYD, LLC			ELAHEE, MD S	
P. O. BOX 1135			ART UNIT	
CHICAGO, IL 60690-1135			PAPER NUMBER	
			2645	

DATE MAILED: 03/30/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/807,677

Applicant(s)

HOFMANN, LUDWIG

Examiner

Md S Elahee

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 16-65 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

DETAILED ACTION

*Specification*

1. The disclosure is objected to because of the following informalities: Please provide the clean version of the specification.

Appropriate correction is required.

*Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 16-28, 42-44, 46-48 and 50-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Pequet et al. (European Pub. No. 0, 689,303 A1).

Regarding claims 16 and 42, Pequet teaches at least one base station (abstract; fig.1; page 1, lines 29-35).

Pequet further teaches a plurality of mobile stations including at a least first and a second mobile station, each of the plurality of mobile stations able to carry out transmission and reception operations in both a duplex mode and a semiduplex mode, the duplex mode being a frequency division duplex mode and the semiduplex mode being a time division duplex mode (abstract; fig.1, fig.2; page 2, lines 14-22, page 3, lines 14-22, page 4, lines 26-41, page 5, lines 66, 67, page 6, lines 1-15, 48, 58, page 7, line1).

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Pequet further teaches that the first mobile station simultaneously carries out transmission and reception operations with the at least one base station in the duplex mode and carries out transmission and reception operations with the second mobile station in the semiduplex mode (fig.1, fig.2; page 2, lines 14-22, page 3, lines 14-22, page 4, page 4, lines 26-41, page 5, lines 66, 67, page 6, lines 1-15, 48, 58, page 7, line1).

Regarding claims 17 and 43, Pequet teaches that the transmission and reception operations of the first mobile station are carried out cyclically in time slots, the time slots for the duplex and semiduplex modes running synchronously with respect to one another (fig.1, fig.2; page 2, lines 14-22, page 4, lines 26-41, page 5, lines 66, 67, page 6, lines 1-15, 48, 58).

Regarding claims 18, 19 and 44, Pequet teaches that signals from the second mobile station are transmitted via the first mobile station to the base station, and signals from the base station are transmitted via the first mobile station to the second mobile station (fig.1; page 3, lines 14-22).

Regarding claims 20-23 and 46-48, Pequet teaches that the first mobile station further carries out transmission and reception operations with a third mobile station in the semiduplex mode (fig.1, fig.2; page 5, lines 66, 67, page 6, lines 1-15, 48, 58).

Regarding claims 24-27, Pequet teaches that the first mobile station further carries out transmission and reception operations with a third mobile station in the semiduplex mode, such that signals from the second mobile station are transmitted via the first mobile station to the third mobile station, and signals from the third mobile station are transmitted via the first mobile station to the second mobile station (fig.1, fig.2; page 5, lines 66, 67, page 6, lines 1-15, 48, 58).

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Regarding claim 28, Pequet teaches that the plurality of mobile stations are coupled to one another to form at least one of a communication chain and a communication network (abstract; fig.1; page 2, lines 14-22, page 3, lines 14-22).

Regarding claims 50-52, Pequet teaches that a part for additionally carrying out transmission and reception operations with a third mobile station in the semiduplex mode, such that signals from the second mobile station are transmitted via the first mobile station to the third mobile station, and signals from the third mobile station are transmitted via the first mobile station to the second mobile station (fig.1, fig.2; page 5, lines 66, 67, page 6, lines 1-15, 48, 58, page 7, line1).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 29-41, 45, 49 and 53-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pequet et al. (European Pub. No. 0, 689,303 A1) and in view of Narusawa (U.S. Patent No. 5,956,623).

Regarding claims 29-32 and 54-57 are rejected for the same reasons as discussed above with respect to claim 18. Furthermore, Pequet fails to teach "the first mobile station may switch on and off, at least one of manually and automatically". Narusawa teaches that the first mobile station may switch on and off, at least one of manually and automatically (col.2, line 65-col.3, line 18). Thus, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to modify Pequet to allow the first mobile station to switch on and off, at least one of manually and automatically as taught by Narusawa. The motivation for the modification is to have doing so in order to control the operation of radio unit.

Regarding claims 33-41, 45 and 58-65 are rejected for the same reasons as discussed above with respect to claims 18, 20 and 29.

Regarding claims 49 and 53 are rejected for the same reasons as discussed above with respect to claims 20 and 50 simultaneously.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Uratani (U.S. Patent No. 5,850,593) teach Mobile communication for a mobile station near or outside a service area of a base station.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alam Elahee whose telephone number is (703) 305-4822. The examiner can normally be reached on Mon to Fri from 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

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M. E .

MD SHAFIUL ALAM ELAHEE

March 22, 2004

FAN TONG  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

A handwritten signature in black ink, appearing to read 'Fan Tong', is written over the printed name and title.